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PATENT COOPERATION TREATY

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Commissioner
US Department of Commerce
United States Patent and Trademark
Office, PCT
2011 South Clark Place Room
CP2/5C24
Arlington, VA 22202
ETATS-UNIS D'AMERIQUE
in its capacity as elected Office

Date of mailing (day/month/year) 30 October 2001 (30.10.01)	
International application No. PCT/CA01/00166	Applicant's or agent's file reference 04834-007-WO
International filing date (day/month/year) 12 February 2001 (12.02.01)	Priority date (day/month/year) 11 February 2000 (11.02.00)
Applicant HOOPER, Mark, Edmund et al.	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:
11 September 2001 (11.09.01)

☐ in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was
☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740.14.35	Authorized officer Eugénia SANTOS (Fax 338.87.40) Telephone No.: (41-22) 338.83.38
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From the INTERNATIONAL BUREAU

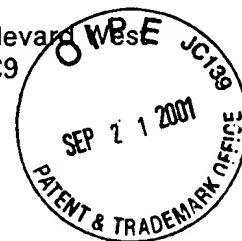
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**NOTICE INFORMING THE APPLICANT OF THE
COMMUNICATION OF THE INTERNATIONAL
APPLICATION TO THE DESIGNATED OFFICES**

(PCT Rule 47.1(c), first sentence)

To:

BROUILLETTE, rt
Brouillette Kosie
Suite 2500
1100 René-Lévesque Boulevard
Montreal, Quebec H3B 5C9
CANADA



Date of mailing (day/month/year) 16 August 2001 (16.08.01)		
Applicant's or agent's file reference 04834-007-WO		IMPORTANT NOTICE
International application No. PCT/CA01/00166	International filing date (day/month/year) 12 February 2001 (12.02.01)	Priority date (day/month/year) 11 February 2000 (11.02.00)
Applicant PIXEL SYSTEMS, INC. et al		

1. Notice is hereby given that the International Bureau has communicated, as provided in Article 20, the international application to the following designated Offices on the date indicated above as the date of mailing of this Notice:
KP, KR, US

In accordance with Rule 47.1(c), third sentence, those Offices will accept the present Notice as conclusive evidence that the communication of the international application has duly taken place on the date of mailing indicated above and no copy of the international application is required to be furnished by the applicant to the designated Office(s).

2. The following designated Offices have waived the requirement for such a communication at this time:

AE, AG, AL, AM, AP, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EA, EE, EP, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OA, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU,

The communication will be made to those Offices only upon their request. Furthermore, those Offices do not require the applicant to furnish a copy of the international application (Rule 49.1(a-bis)).

3. Enclosed with this Notice is a copy of the international application as published by the International Bureau on
16 August 2001 (16.08.01) under No. WO 01/60069

REMINDER REGARDING CHAPTER II (Article 31(2)(a) and Rule 54.2)

If the applicant wishes to postpone entry into the national phase until 30 months (or later in some Offices) from the priority date, a demand for international preliminary examination must be filed with the competent International Preliminary Examining Authority before the expiration of 19 months from the priority date.

It is the applicant's sole responsibility to monitor the 19-month time limit.

Note that only an applicant who is a national or resident of a PCT Contracting State which is bound by Chapter II has the right to file a demand for international preliminary examination.

REMINDER REGARDING ENTRY INTO THE NATIONAL PHASE (Article 22 or 39(1))

If the applicant wishes to proceed with the international application in the national phase, he must, within 20 months or 30 months, or later in some Offices, perform the acts referred to therein before each designated or elected Office.

For further important information on the time limits and acts to be performed for entering the national phase, see the Annex to Form PCT/IB/301 (Notification of Receipt of Record Copy) and Volume II of the PCT Applicant's Guide.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer J. Zahra
Facsimile No. (41-22) 740.14.35	Telephone No. (41-22) 338.83.38

PATENT COOPERATION TREATY

PCT

REC'D 15 MAY 2002

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 04834-007-WO		See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) FOR FURTHER ACTION	
International application No. PCT/CA01/00166	International filing date (day/month/year) 12/02/2001	Priority date (day/month/year) 11/02/2000	
International Patent Classification (IPC) or national classification and IPC H04N7/173		RECEIVED JUL 08 2002 Technology Center 2600	
Applicant PIXEL SYSTEMS, INC. et al.			

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.


2. This REPORT consists of a total of 4 sheets, including this cover sheet.

- ☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 13 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 12/09/2001	Date of completion of this report 13.05.2002
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer McGrath, S Telephone No. +49 89 2399 8961



INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/CA01/00166

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17))*):

Description, pages:

2-9	as originally filed		
1,1a-1b,10-14	as received on	03/05/2002 with letter of	23/04/2002

Claims, No.:

1-22	as received on	03/05/2002 with letter of	23/04/2002
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Drawings, sheets:

1,2	as originally filed
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2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/CA01/00166

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	
	No:	Claims	1-22
Inventive step (IS)	Yes:	Claims	
	No:	Claims	1-22
Industrial applicability (IA)	Yes:	Claims	1-22
	No:	Claims	

2. Citations and explanations
see separate sheet

Concerning Point V - Reasoned Statement

The following documents, cited in the International Search Report, are mentioned in this written opinion:

D1: WO 97 12486 A
D2: US-A-5 937 392
D3: EP-A-0 967 804
D4: US-A-5 335 081
D5: US-A-5 819 092
D6: WO 00 29969 A

1. The subject-matter of claim 1 does not meet the requirements of Article 33(2) and Rule 64(1-3) PCT since it lacks novelty.

See D1.

D1 also concerns visual displays which are "advertising panels arranged to be viewable by a plurality of individuals". It should be noted that any domestic TV set falls under the definition of an "advertising panel ... viewable by a plurality of individuals"

2. The subject-matter of claim 22 does not meet the requirements of Article 33(2) and Rule 64(1-3) PCT since it lacks novelty.

See D1, in particular claims 1 & 2, Fig. 1, & pages 9, 15, 19, 21.

3. The dependent claims 2-21 do not appear to contain any additional features which, in combination with the features of any claim to which they refer, establish novelty or at least involve an inventive step - see D1 (at least implicitly) and D2-D5
4. The priority of the present application has not yet been checked.
However, should the priority prove to be invalid D6 would become prior art and in a such a case would appear to render obvious the subject-matter of claims 1-28 - Article 33(3) and Rule 65(1)(2) PCT.

**METHOD AND APPARATUS FOR THE DISPLAY OF
SELECTED IMAGES AT SELECTED TIMES USING
AN AUTONOMOUS DISTRIBUTION SYSTEM**

5

BACKGROUND OF THE INVENTION

10

● Field of the Invention

15

This invention relates to a method for the remote display of selected images at selected times and to an Autonomous Distribution System (ADS) and components thereof used with such method. This method and system offer an end-to-end solution for advertisers, retailers, television networks and other information providers wishing to access, via geographic, demographic and/or other selectors, a diverse network of remotely located electronic multimedia displays of varying format and capacity.

20

● Description of Prior Art

25

30

Geographic, video and similar display systems are known in the art and are often used for advertising and information presentation. Multiple display presentation systems having a set of displays for jointly reproducing, either in still or continuous motion, successive sets of correlated images according to a desired and modifiable presentation program are known. An example of such system is shown in US patent 5,335,081 (Yamaguchi et al.) which relates to a visual presentation system having a set of display devices for concurrent reproduction of correlated visual images prerecorded on record media such as video disks. This system is described as lending itself to use for the commercial publicity of new products and processes, the introduction of business corporations and other institutes, the disclosure of scientific and technological theories and findings, and a variety of other presentations addressed to limited local audiences. By contrast, the instant invention is destined to distributed group audiences.

5 US Patents 5,488,385 (Singhal et al.), 5,692,330 (Anderson), 5,694,141 (Chee),
5,933,154 (Howard et al.), 5,361,078 (Caine), 4,866,530 (Kalua), 4,800,376 (Suga et al.)
and 4,760,388 (Tatsumi et al.) also describe similar systems.

10 US Patent 5,819,092 (Ferguson et al.) describes online system development tools that
include features, functions and capabilities to support commercial online (Internet)
services and more particularly a sophisticated fee setting tool that allows a developer to
assign a system of fees for access to an online service. The fee setting tool allows
complex fee arrangements to be created using well defined scripting language. However,
15 it does not describe or suggest a method for the remote display of selected images at
selected times to distributed group audiences or an autonomous distribution system and
components thereof for use with such method in accordance with the invention.

20 US Patent 5,937,392 (Alberts) describes an advertising frequency control system
specifically designed to control Internet banner advertising. It does not relate to the
management of advertisements destined to distributed groups.

25 European patent application EP 0 967 804 (Anderson et al.) describes a method of
selecting, for presentation, one of a plurality of available television programs destined to
subscribers using a digital television receiver, the selected television program temporally
divided into a commercial portion and a program portion, the commercial portion
including a plurality of commercial streams, at least a portion of the commercial streams
including indicia of demographic affinity; comparing, to a demographic profile, the
indicia of demographic affinity of the commercial streams including indicia of
demographic affinity; selecting, for presentation during the commercial portion of the
30 selected television program, a commercial stream having indicia of demographic affinity
appropriate to the demographic profile; the selected television program and the selected
commercial stream being aligned in a manner enabling a relatively seamless transition
between streams. Again, it is destined to individual subscribers rather than to grouped
audiences.

5 A similar system is also described in PCT International publication WO 97/12486
(Slezak). Slezak's interactive multi-media system has a video server for providing a
primary on demand video program interleaved with secondary multimedia programming,
such as advertising, to an individual subscriber's television set. The system also uses a
10 database for storing information about a viewer and the content of the primary video
program. The secondary multimedia programming has a varying content determined by
the data contained in the database, and as such, can be changed based upon an individual
viewer's demographics in conjunction with the subject matter being displayed by the
primary video program. Preferably, the system is accessed via the Internet, wherein the
subscriber's house is connected to an Internet head end or node via a cable modem.
15 Again, it is destined to individual subscribers rather than to grouped audiences.

5 sales/marketing access programs using connection via the Internet or other known means.

Concentrator panels which are large format graphical displays running on independent computer systems are used in conjunction with each service and transmission center. Each concentrator panel shows the state of the overall system. Two specific types of
10 concentrator panels are used: the network activity monitor and the system status and transmission activity monitor.

The monitoring programs used to update the concentrator panels are capable of operating using direct LAN, Internet or other known connections to the system. This permits the
15 system to be monitored by managers at remote sites using varying equipment.

The sales access programs allow sales and marketing personnel to plan and book time on the system without actually having to prepare content. The reduced bandwidth requirements permit the sales personnel to operate their stations at a customer site using
20 an Internet connection. Each station can present the state of inventory and availability on the system. The sales personnel can begin and plan campaigns, and finally make sales proposals. The system then automatically forwards the instructions to the Scheduling System for the fully trained workstation operators to continue the required operations for implementation using the Scheduling Workstations.

25 There is, therefore, provided a system which comprises:

A system to control the display of digital multimedia content on a plurality of remote visual displays (260, 261, 262, 360, 361, 362, 460, 461, 462) connected together via a
30 broadband network (610) characterized in that each said visual display is an advertising panel arranged to be viewable by a plurality of individuals.

There is also provided a system as described above further comprising:

- 5 a. at least one scheduling server (200, 300, 400) itself comprising computer processor means (210) and data storage means (220);
- b. first means for processing data to determine the availability of air time periods on each said visual display;
- 10 c. second means for processing data to select and reserve available air time period on each said visual display;
- d. third means for processing data to associate one or more multimedia content to be displayed to each said reserved air time period.

15 In a preferred embodiment, there is provided a method for the display of multimedia content on one or more display screens connected to one or more display controllers which are themselves connected to a scheduling server and a transmission server via a data communication network comprising the following steps:

- 20 a) selecting multimedia content to be displayed;
- b) storing said content on the scheduling server;
- c) selecting one of said display screens on which the content is to be displayed;
- d) storing such display screen selection on said scheduling server;
- 25 e) selecting a time interval during which said content is to be displayed on said display screen;
- f) storing said time interval selection on said scheduling server;
- g) transmitting said stored content and said stored time interval selection to the display controller connected to said selected display screen;
- 30 h) displaying the selected content on the selected display screen during the selected time interval.

DESCRIPTION OF THE DRAWINGS

Figure 1 is a schematic representation of a first embodiment of an autonomous digital

5 presentation system in accordance with the invention. The diagram shows a system involving several service bureaux each containing a Scheduling Server and a plurality of workstations connected via high-speed connection with a Transmission centre containing a Transmission Control System. The Transmission Control System is also connected via a secondary network with a diverse group of display sub-systems each containing one or
10 more display screen(s).

Figure 2 is a schematic representation of a complex display sub-system which may be used with the invention.

15 DETAILED DESCRIPTION OF A PREFERRED EMBODIMENT

The digital presentation system shown in figure 1 comprises a Transmission Centre 10 and several Service Bureaux 20, 30 and 40 all controlling groups of display sub-systems. The Transmission Centre 10 comprises a Transmission Control System 100 comprising
20 a CPU 110 a central storage 120, a first computer screen 130, a second computer screen 135, a large concentrator display panel 140 all connected to the CPU 110.

Similarly, there are provided Service Bureaux each containing Scheduling Servers 200, 300 and 400 respectively, each having a CPU, local storage, multiple workstations and
25 one large concentrator display panel all connected to their respective CPUs 210, 310 and 410.

All of the Scheduling Servers are connected via a high bandwidth network for example Teleglobe's high bandwidth network 700. This network of Scheduling Servers form the
30 Scheduling System. Network 700 also connects all Scheduling Servers to the Transmission Control System 100.

A second network 600 connects the Transmission Control System to all the individual display sub-systems 520, 521, 522, 530, 531, 532, 540, 541 and 542 via a satellite dish

5 500 and a Ku band satellite 550.

Each display sub-system comprises a satellite dish, a CPU, a storage mechanism and at least one display screen adapted to be seen by passers-by.

10 A single Service Bureau can service a given metropolitan area in which a plurality of display sub-systems can be strategically deployed inside buildings or outside where they may replace traditional billboards.

15 Demographic data is gathered and inputted in the central storage 120 via workstations 200, 300 and 400. Such demographic data can either be global, for a given metropolitan region and/or specific for each display.

20 The needs and preferences of each advertiser and information provider who wishes to use the digital presentation system are gathered by the sales personnel and are inputted in the database maintained in the central storage 120 via the workstations and Scheduling Servers. These preferences include demographics, multimedia content, airtime preferences and budgetary constraints. All of these preferences and constraints are entered into the central storage 120 via the Scheduling Servers 200, 300 and 400. Each workstation operator can reserve air time for display sub-systems located in his/for
25 metropolitan area or indeed in any other display sub-system connected to the Transmission Control System 100 via the network 600.

30 Each workstation operator also has the option of using optimisation software contained in the Scheduling Servers to suggest a schedule to the client which will take into consideration the aforesaid constraints (demographics, content, air time and budget).

Once the schedule is determined, it is inputted into the system which will then prepare a play list or schedule incorporating the needs of all the advertisers and information providers wishing to use each individual display sub-system. As each display performs

5 its broadcast, a detailed log of all the relevant data is kept in the digital presentation system for future reference and to provide evidence to the advertisers and information providers to the effect that each given multimedia content was broadcast at a given site over a precise period of time.

10 A camera equipped with image recognition software can also be provided at each site and managed by the display sub-system to actually determine the number and characteristics of the actual audience during each broadcast. This information can be used for statistical and even billing purposes.

15 It is, of course, understood that the invention is not to be limited to the exact details of the representative digital presentation system and components thereof set forth above. A variety of departures from the foregoing disclosure may be made in order to conform to the design preferences or the requirements of each specific application of the invention. It is therefore appropriate that the invention be construed broadly and in a manner of
20 consistent with the fair meaning or proper scope of the claims that follow.

For example, this invention may be used by a television network to schedule commercials or public announcements which are adapted to the needs of each local station.

5 CLAIMS

What is claimed is:

- 10 1. A system to control the display of digital multimedia content on a plurality of remote visual displays (260, 261, 262, 360, 361, 362, 460, 461, 462) connected together via a broadband network (610) characterized in that each said visual display is an advertising panel arranged to be viewable by a plurality of individuals.
- 15 2. A system as claimed in claim 1, further characterized in that it comprises:
- a. at least one scheduling server (200, 300, 400) itself comprising computer processor means (210) and data storage means (220);
 - b. first means for processing data to determine the availability of air time periods on each said visual display;
 - 20 c. second means for processing data to select and reserve available air time period on each said visual display;
 - d. third means for processing data to associate one or more multimedia content to be displayed to each said reserved air time period.
- 25 3. A system as claimed in claim 2, further characterized in that it comprises first means (10) for transmitting said multimedia content to the corresponding visual display.
- 30 4. A system as claimed in claim 3, further characterized in that it comprises second means for displaying said multimedia content on the corresponding visual display during the corresponding time period.
5. A system as claimed in claim 4, further characterized in that it comprises first means for inputting (230, 235, 330, 335, 430, 435) and storing demographic data

5 in relation to the geographic location of each visual display.

6. A system as claimed in claim 5 further characterized in that it comprises:

- a. second means for inputting and storing data related to the multimedia content preferences of each user of the system;
- 10 b. third means for inputting data related to the air time period preferences of each user of the system;
- c. fourth means for processing data to determine for each visual display, the actual play list by optimally correlating said available air time periods, said air time period preferences, and said multimedia content preferences.

15 7. A system as claimed in claim 6 wherein said fourth means for processing data comprises:

- a. means to determine, for each said visual display and for a predetermined air time period, the duration of any unreserved air time period,
- 20 b. means to fill each said unreserved air time period with digital content which is compatible with the remaining multimedia content in the said corresponding predetermined air time period.

8. A system as claimed in claim 5 further comprising:

- 25 a. second means for inputting and storing data related to the multimedia content preferences of each user of the system;
- b. third means for inputting data related to the air time period preferences of each user of the system;
- c. fourth means for processing data to determine for each visual display, the actual play list by optimally correlating said available air time periods, said air time period preferences, and said multimedia content preferences.

30 9. A system as claimed in claim 8 wherein said fourth means for processing data comprises:

- 5
- a. means to determine, for each said visual display and for a predetermined air time period, the duration of any unreserved air time period,
 - b. means to fill each said unreserved air time period with digital content which is compatible with the remaining multimedia content in the said corresponding predetermined air time period.

10

10. A system as claimed in claim 5 further comprising:

15

- a. second means for inputting and storing data related to the multimedia content preferences of each user of the system;
- b. third means for inputting data related to the air time period preferences of each user of the system;
- c. fourth means for inputting and storing data related to the demographic preferences of each user of the system;
- d. fourth means for processing data to determine for each visual display, the actual play list by optimally correlating said available air time periods, said air time period preferences, said multimedia content preferences, said demographic data and said demographic preferences.

20

11. A system as claimed in claim 10 wherein said fourth means for processing data comprises:

25

- a. means to determine, for each said visual display and for a predetermined air time period, the duration of any unreserved air time period;
- b. means to fill each said unreserved air time period with digital content which is compatible with the remaining multimedia content in the said corresponding predetermined air time period.

30

12. A system as claimed in claim 1 wherein said broadband network is a satellite network (610).

13. A system as claimed in claim 3 wherein said first means for transmitting data

- 5 comprises a transmission control system (10) connected to the scheduling server and the visual displays.
14. A system as claimed in claim 13 wherein said transmission control system is a television station.
- 10 15. A system as claimed in claim 5 wherein said scheduling server includes a database containing data records relating to each said display screen, including data relating to:
- 15 a. its geographical location;
b. available air time periods;
c. demographic data;
d. traffic patterns.
- 20 16. A system as claimed in claim 15 further including data relating to budgetary restrictions.
17. A system as claimed in claim 15 further including data relating to air time restrictions.
- 25 18. A system as claimed in claim 15 further including data relating to target audience size.
19. A system as claimed in claim 15 further including data relating to industry restrictions.
- 30 20. A system as claimed in claim 15 further including data relating to market penetration.
21. A system as claimed in claim 15 further including data relating to:

- 5 a. budgetary restrictions;
- b. air time restrictions;
- c. target audience size;
- d. industry restrictions;
- e. market penetration.
- 10
22. A method for the display of digital multimedia content on a plurality of remote visual displays (260, 261, 262, 360, 361, 362, 460, 461 462) which are connected to together via a data communication network (610) characterized in that each said visual display is an advertising panel arranged to be viewable by a plurality
- 15 of individuals, said method comprising the following steps:
- a. selecting the multimedia content to be displayed;
- b. storing said content on a scheduling server (200, 300, 400);
- c. selecting one of said viewed displays on which the content is to be displayed;
- 20 d. storing such viewed display selection on said scheduling server;
- e. selecting a time interval during which said content is to be displayed on said visual display screen;
- f. storing said time internal selection on said scheduling server;
- g. transmitting said stored content and said stored time interval selection to
- 25 a display controller connected to said selected visual display;
- h. displaying the selected content on the selected visual display during the selected time interval.

(19) World Intellectual Property Organization
International Bureau



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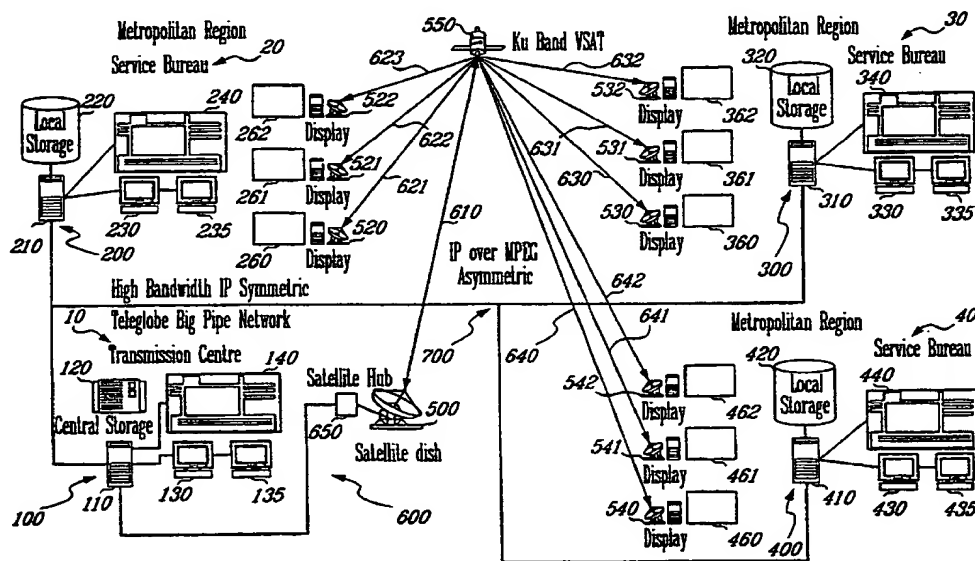
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[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR THE DISPLAY OF SELECTED IMAGES AT SELECTED TIMES USING AN AUTONOMOUS DISTRIBUTION SYSTEM



(57) Abstract: This invention relates to a method for the remote display of selected images at selected times and to an autonomous digital distribution system and components thereof used with such method. This method and system allow advertisers, retailers, television networks and other information providers to have access and maintain, via geographic, demographic and/or other selectors to a diverse network of remotely located electronic multimedia displays of varying format and capacity. The system may also comprise means to translate sold and unsold air-time into actual presentation schedules.



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International Application No.

PCT/CA 01/00166

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H04N7/173

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H04N G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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A	EP 0 967 804 A (SARNOFF CORP) 29 December 1999 (1999-12-29) the whole document	1-28
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☒ Further documents are listed in the continuation of box C.

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- * & * document member of the same patent family

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INTERNATIONAL SEARCH REPORT

International Application No

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